## STATE OF ARKANSAS INFORMATION TECHNOLOGY CONTRACTOR REQUIREMENTS

- 1. Project Manager Provides competent leadership and responsible direction through successful performance of a variety of detailed, diverse elements of project management. Directs completion of tasks within estimated time frames and budget constraints. Schedules and assigns duties to project team, comprising State technical and program staff as well as contractors from one or more firms. Enforces work standards and reviews/resolves work discrepancies to ensure compliance with project requirements. Reports in writing and orally to State management as necessary. Requires a very heavy background in managing large, complex projects with outstanding interpersonal and communication skills.
- **2. Systems Analyst** Analyzes and documents requirements for information systems. Develops and/or oversees plans for automated data processing systems from project inception to conclusion. Constructs data models and activity/process models as may be required to define system functions. Coordinates closely with programmers to ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions. Provides support for the installation, testing, implementation, and ongoing maintenance of information systems. Conduct and document the results of special studies dealing with systems and/or business process issues. Requires a minimum of 3 years of current experience in this job class with excellent interpersonal and communication skills.
- 3. Programmer Analyst (Mainframe) Analyzes functional business applications and design specifications for developing programs. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Primary skill set comprises COBOL, IMS DB/DC, CICS, and DB2. Secondary skill set includes all other mainframe software standards. Requires a minimum of 1 year of current experience in this job class.
- **4.** Advanced Programmer Analyst (Mainframe) Analyzes functional business applications and creates design specifications for developing programs. Develops block diagrams and logic flow charts. Translates detailed design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Primary skill set comprises COBOL, IMS DB/DC, CICS, and DB2. Secondary skill set includes all other mainframe software standards. Requires a minimum of 2 years of current experience in this job class.
- <u>5. Programmer Analyst (Client Server/Micro)</u> Analyzes functional business applications and design specifications for developing programs. Translates detailed design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. <u>Primary</u> skill set comprises UNIX, Windows, Oracle,

PowerBuilder, and FoxPro. <u>Secondary</u> skill set includes all other Departmental/Desktop software standards. Requires a minimum of 1 year of current experience in this job class.

- **6. Advanced Programmer Analyst (Client Server/Micro)** Analyzes functional business applications and creates design specifications for developing programs. Translates detailed design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Primary skill set comprises UNIX, Windows, Oracle, PowerBuilder, and FoxPro. Secondary skill set includes all other Departmental/Desktop software standards. Requires a minimum of 2 years of current experience in this job class
- 7. Web Developer Create programs from specifications to be implemented on Internet/Intranet/extranet. Experience with HTML, Browser GUI Elements and Server-side programming/communication is required. Familiarity with distributed object management such as Java/RMI and/or CORBA is a plus. Also experience with multi-tiered Application architecture and implementation is helpful. Requires 1 year of current experience in this job class.
- **8. Advanced Web Developer** Create advanced programs and specifications to be implemented on Internet/Intranet/extranet. Experience with HTML, Browser GUI Elements, Server-side programming/communication, and distributed object management is required. Object-oriented experience with OO Modeling tools and techniques is required for design tasks. Requires 2 years of current experience in this job class.
- <u>9. Object Oriented Developer</u> Create programs and specifications using Object-oriented Modeling tools. Knowledge/experience in open multi-tiered Component Development techniques and remote object management is required. Ability to work with Component Models and Designs is a key requirement. Requires 1 year of current experience in this job class.
- <u>10. Advanced Object Oriented Developer</u> Create Specifications and Component Architectures using Object-oriented Modeling tools. Knowledge/experience in open multi-tiered Component Development techniques and remote object management is required. Ability to create Component Models and Designs is a key requirement. Requires 2 years experience in this job class.
- <u>11. Network Administrator</u> Responsible for the daily operation and support of Local Area Network computer systems. Responsibility may include installation of hardware and software components comprising the network. Must be able to work with vendors and State support staff to quickly diagnose LAN problems and restore service to users in the event of service disruptions. Requires 1 year of current experience in this job class.
- <u>12. Advanced Network Administrator</u> Responsible for the support of Local Area Network computer systems including servers on the WAN used for enterprise applications. Responsibility may include installation of hardware and software components comprising the network. Must be able to work with vendors and State support staff to quickly diagnose LAN problems and restore service to users in the event of service disruptions. Must be able to diagnose problems and incompatibilities that may occur

with integrated software products and with hardware dependencies. Requires 2 years of current experience in this job class.

- **13. LAN System Programmer** Responsible for installation, maintenance, and support of operating systems, communications software, data base packages, compilers, utility programs, and related systems software. Create special-purpose software to ensure efficiency and integrity between systems and applications. Must be able to work with vendors and State support staff to quickly diagnose operating systems, communications software, database software, or utility problems and restore service to users in the event of service disruptions. Requires a minimum of 1 year current experience in this job class.
- 14. Advanced LAN System Programmer Responsible for installation, maintenance, and support of operating systems, communications software, data base packages, compilers, utility programs and related systems software. Modify existing software as well as create special-purpose software to ensure efficiency and integrity between systems and applications. Must be able to work with vendors and State support staff to quickly diagnose operating systems, communications software, database software, or utility problems and restore service to users in the event of service disruptions. Must be able to diagnose problems and incompatibilities that may occur with integrated software products and with hardware dependencies. Must be able to perform capacity planning, do performance tuning, and evaluate software products. Requires 2 years of current experience in this job class.
- 15. MVS System Programmer Responsible for installation, maintenance, and support of operating systems, communications software, data base packages, compilers, utility programs, and related systems software. Create special-purpose software to ensure efficiency and integrity between systems and applications. Must be able to work with vendors and State support staff to quickly diagnose operating systems, communications software, database software, or utility problems and restore service to users in the event of service disruptions. Requires a minimum of 1 year current experience in this job class.
- 16. Advanced MVS System Programmer Responsible for installation, maintenance, and support of operating systems, communications software, data base packages, compilers, utility programs and related systems software. Modify existing software as well as create special-purpose software to ensure efficiency and integrity between systems and applications. Must be able to work with vendors and State support staff to quickly diagnose operating systems, communications software, database software, or utility problems and restore service to users in the event of service disruptions. Must be able to diagnose problems and incompatibilities that may occur with integrated software products and with hardware dependencies. Must be able to perform capacity planning, do performance tuning, and evaluate software products. Requires 2 years of current experience in this job class.
- <u>17. UNIX System Programmer</u> Responsible for installation, maintenance, and support of operating systems, communications software, data base packages, compilers, utility programs, and related systems software. Create special-purpose software to ensure efficiency and integrity between systems and applications. Must be able to work with vendors and State support staff to quickly diagnose operating systems, communications software, database software, or utility problems and restore service to users in the event of service disruptions. Requires a minimum of 1 year current experience in this job class.

- **18. Advanced UNIX System Programmer** Responsible for installation, maintenance, and support of operating systems, communications software, data base packages, compilers, utility programs and related systems software. Modify existing software as well as create special-purpose software to ensure efficiency and integrity between systems and applications. Must be able to work with vendors and State support staff to quickly diagnose operating systems, communications software, database software, or utility problems and restore service to users in the event of service disruptions. Must be able to diagnose problems and incompatibilities that may occur with integrated software products and with hardware dependencies. Must be able to perform capacity planning, do performance tuning, and evaluate software products. Requires 2 years of current experience in this job class.
- 19. Database Administrator Designs and reviews database systems; evaluates and recommends changes to database systems; and implements new or revised systems to ensure accuracy, efficiency, and adherence to technical standards. Responsible for providing technical assistance to other personnel involved in computer applications development by answering questions, describing techniques, and writing procedures. Monitors application systems performance, evaluates information gathered from users and other staff and review of historical data, and recommends changes to database systems to ensure optimal performance and productivity. May act as project leader in monitoring performance of application systems, and identifies, evaluates, and makes recommendations to management concerning problems or issues in the database environment to ensure optimal performance and productivity of database systems. Responsible for the daily maintenance, tracking and documentation of production database systems including creating and scheduling database specific jobs and determining necessary actions to recover from problems or failures. Develop and enforce the Standards, Procedures, and Guidelines to establish the operational framework in which database management systems are consistently and effectively utilized. Research, identify, evaluate and select database software. Instruct users in the use of database software to enhance database system usage, facilitate problem resolution, and maximize customer service. Requires 2 years of current experience in this job class.
- **20. Data Analyst/Administrator** Analyzes the data and functional requirements using modeling methodologies and analysis techniques. Assists in preparation and presentation of facilitated modeling sessions. Conducts and assists with business analysis interviews. Performs duties in facilitated sessions and analysis interviews. Assists in converting and managing the data repository. Works with the Application Developers, Data Base Administrators, and customers on refining data issue requirements and design. Requires 2 years of current experience in this job class.
- **21. Quality Assurance Inspector/Analyst** Fully and completely inspect all content of a computer application. This must be an individual with a keen eye for detail and a desire to establish and manage quality controls. Experience in: OO Modeling, Java Programming, Database design, and any other related technical specialty is a plus. Expertise in more than one is a requirement. This person is responsible for the quality of all products published on the Internet/Intranet/extranet, and therefore has the ability to stop deployment if the created computer application does not meet all standards (User Interface, Architecture, Programming, Database Design, and Performance). They will participate in Requirement, Design, and Programming reviews. Knowledge of TQM and development of measurement techniques is a plus. Requires 2 years of experience in this job class.

- **22.** Component Librarian Create/maintain a library of Object Components. Must be creative and invent methods of searching hundreds/thousands of developed modules to respond to Component Architecture designs. Ability to suggest alternative architectures to take better advantage of library content is expected, therefore, ability to work with Object-oriented modeling tools is a requirement. Requires 1 year of experience in this job class
- **23.** Change Management Specialist Change Management Specialist works under limited supervision and is responsible for providing change management support for mainframe, client-server, and webbased application environments using DIS products and procedures. Requires 1 year of current experience in this job class.
- **24. Mainframe Operations Specialist** Responsibilities include monitoring application batch operations at an individual Department level. This includes evaluation of system problems and processing abends to determine correct recovery and back out procedures to insure data integrity. Also included is the recovery of data bases, recreating files, and insuring interagency interfaces are correct. Responsibilities also include the monitoring of data sets, data bases, and libraries to insure adequate space allocation and data availability; and monitoring migrations of new or modified programs and programs components across multiple test and production environments. A thorough knowledge of MVS, JES, JCL, ROSCOE, TSO, CA1, and CA7 operations is required for this position. Requires 2 years of current experience in this job class.
- **25. SAP Senior Project Manager** Provides proven leadership and responsible direction through successful performance of a variety of detailed, diverse elements of SAP project management. Directs completion of tasks within estimated time frames and budget constraints. Schedules and assigns duties to project team, comprising State technical and functional staff as well as contractors from one or more firms, working with State Team Leads and Managers. Typical SAP Project Manager candidate for this position will have the following attributes:
  - ASAP Certification
  - PMP Certification
  - Management of SAP Implementation projects whose cost has exceeded two million dollars.
  - Minimum of 3 years experience managing SAP implementation projects
  - Minimum of 3 years experience in SAP knowledge area for the appropriate module as defined by the project needs (i.e., Finance, Human Resources, Materials Management, Sales & Distribution and/or Business Warehouse)
  - Experience with Public sector Industry Solutions and familiar with general government operations highly desirable

**26. ABAP Programmer/Developer** - Provides technical expertise in SAP R/3 programming, interfaces, and reporting. Designs, based on the requirements, the most effective technical solutions. Works with the Functional analysts, Security Analysts, Basis Administration, BW administration or other support staff and provides knowledge transfer to State staff. Develops time, cost, and schedule estimates, reports status and communicates effectively in verbal and written form. A typical candidate will have at least 3 years experience and advanced knowledge in ABAP and testing. Other skill knowledge requested may include Report Writer/Report Painter, batch data files experience, EDI, BAPI, RFC,

IDOCs, Sapscripts, ALE, BW SEM or Business Warehouse extractor/retractor knowledge or experience. Typical ABAP Programmer/developer candidate for this position will have the following attributes:

- ABAP Certification
- Certification or training in SAP knowledge area
- Change management experience
- ASAP Experience/Project management discipline
- SAP programming experience in the areas of the appropriate module as defined by the project needs (i.e., Finance, Human Resources, Materials Management, Sales and Distribution, SEM, and/or Business Warehouse)
- 2 years Public sector/government experience desirable

**27. Basis Administrator** - Provides technical expertise and full support for all SAP system landscapes which includes a large R/3 landscape and Business Warehouse (BW) landscape. Support encompasses work performed at the R/3 application level, the data base level and the operating system level. Provides support for implementing SAP support packs, upgrades and/or archiving projects. Provides knowledge transfer to State staff. Communicates effectively in verbal and written form. Typical Basis Administrator candidate for this position will have the following attributes:

- Basis Certification
- 5+ years Public sector/government experience as Basis Administrator
- Minimum 3 years experience as Basis Administrator
- SAP R/3 and BW, AIX Unix, and DB2 technology experienced skills
- Expert proficiency in problem solving, performance tuning, business continuity, archiving, and SAP security administration
- ASAP Experience/Project management discipline
- SAP BW Basis Administration experience

**28.** mySAP.com Application Consultant – Effectively designs how the required business processes and analytical/reporting requirements may best be accomplished in the software configuration and transfers application design and configuration knowledge to the functional and technical team. Offers and provides solutions for items that may not be standard SAP configuration. Provides information to the organization change management process, based on the design. Interfaces with legacy systems experts. Facilitates knowledge transfer to other project team members. Designs and develops data solutions and strategies to satisfy the requirements of mySAP.com components (SEM, BW, CRM, etc). Documents process procedures. Typical mySAP.com Application Consultant candidate for this position will have the following attributes:

- ASAP Certification desirable
- mySAP.com Certification in specific knowledge area required as defined by the project needs (BW, SEM, PLM, CPM, etc.)
- Minimum of 3 years experience in mySAP.com knowledge area for the appropriate module as defined by the project needs (i.e., BW, SEM, CPM, CRM, SCM, PLM, SRM, etc.)
- Non-SAP Data Access tools (SAPhir, Business Objects, Crystal Reports)
- Expertise in Logical modeling, business analysis and design
- R/3 level 3 knowledge in one knowledge area in Public Sector
- 1+ years experience in Public Sector implementations

- **29.** R/3 Application Consultant Effectively designs how the required business processes and analytical/reporting requirements may best be accomplished in the software configuration, configures the design, and transfers application design and configuration knowledge to the functional and technical team. Offers and provides solutions for items that may not be standard SAP configuration. Provides information to the organization change management process, based on the design. Interfaces with legacy systems experts. Facilitates knowledge transfer to other project team members. Designs and develops data solutions and strategies to satisfy the requirements of R/3 Public Sector components (FI, CO, FM, SD, MM, HR, TM, etc). Documents process procedures. Typical R/3 Application Consultant candidate for this position will have the following attributes:
  - ASAP Certification desirable
  - R/3 knowledge area certification for the knowledge area for which assistance is requested, as defined by the project needs (FI, CO, FM, SD, MM, HR, etc.)
  - Minimum of 3 years experience in R/3 knowledge area for the appropriate module as defined by the project needs (i.e., FI, CO, FM, SD, MM, HR, etc.)
  - ABAP/SAP Query
  - Expertise in Logical modeling, business analysis and design
  - Change management experience
  - Project management discipline
  - 1+ years experience in Public Sector implementations
- <u>30. R/3 Workflow Consultant</u> Analyzes existing business processes, determines suitability for workflow, maps to a process model(s), configures, and implements the workflow components. Provides information to the organization change management process, based on the process design. Interfaces with subject matter experts. Facilitates knowledge transfer to other project team members. Documents process procedures. Typical Workflow Consultant candidate for this position will have the following attributes:
  - ASAP Certification desirable
  - A R/3 knowledge area certification
  - 5+ years SAP R/3 workflow experience
  - Change management experience
  - Project management discipline
- <u>31. SAP Technical Consultant</u> Works with the Project Manager and Technical Team Lead in one or more areas to complete the technical requirements planning and carry out the technical system tasks and custom development. The technical areas could be system administration, database administration, network administration, operating system administration, or a cross-application or ABAP developer. Offers and provides solutions for items that may not be standard SAP configuration. Typical SAP Technical Consultant candidate for this position will be proficient in the following attributes:
  - R/3 knowledge area certification for the knowledge area for which assistance is requested
  - SAP database knowledge using UDB/DB2
  - MySAP.Com components, core, and network technology
  - ASAP and project management discipline
  - SAP interface experience

- Testing experience
- <u>32. SAP Training Specialist</u> Provides 'Train the Trainer" training and assistance in course and material development for Public Sector R/3 or mySAP.com knowledge areas. Training assistance may be requested. Communicates effectively in verbal and written form. Typical SAP Training Specialist candidate for this position will have the following attributes:
  - 3+ years SAP trainer
  - 5+ years Public Sector SAP experience desirable
  - Functional or technical SAP component certification
- <u>33. SAP Tester</u> Develops and executes integration testing as the Lead or part of a Test Team using the test scripts. May direct completion of tasks within estimated time frames and budget constraints. Works with Project Manager, Functional team, Quality Assurance, and System Administration to provide test results and issues. Typical SAP Tester candidate for this position will have the following attributes:
  - Proficient Public Sector SAP knowledge area experience
  - SAP testing experience on multiple large projects
  - Proficient experience using Mercury Interactive
- <u>34. BW Query Developer</u> Provides technical expertise in developing SAP Business Warehouse queries using Business Explorer (BEX), or a 3<sup>rd</sup> party tool such as Crystal, or Business Objects. Designs queries for most effective and easy customer information access. Works closely with the BW Data Modeler/DBA, and BW Subject Content Analyst. Also may work with BW/SEM(BPS and CPM) implementations of budgeting knowledge areas and infocubes/infopackages. Reports status and communicates effectively in verbal and written form. Typical BW Query Developer candidate for this position will have the following attributes:
  - BW Certification
  - 4+ years general data warehouse knowledge and experience
  - Logical and Dimensional Modeling
  - ASAP Experience/Project management discipline
  - SAP Level 2+ training in R/3 knowledge area
  - 2+ years SAP Public sector knowledge area experience desirable
  - SEM training and experience
  - Data Quality knowledge and practical experience
  - Knowledge of 3<sup>rd</sup> party tools (Business Objects, Crystal, SAPhir, etc.)
- 35. BW Data Modeler/DBA Provides technical expertise in developing SAP Business Warehouse Infocube and related data models using Logical and Dimension Data modeling standard techniques. Creates the Physical data tables and the scripts for the data loads. Designs models that meet the requirements documented by the SAP BW Consultant, Business Analyst and/or SAP BW Technology Lead. Also may work with BW/SEM(BPS and CPM) implementations of budgeting knowledge areas. Reports status and communicates effectively in verbal and written form. Typical BW Data Modeler/DBA candidate for this position will have the following attributes:

• BW Certification

- 4+ years general data warehouse knowledge and experience
- Logical and Dimensional Modeling
- ASAP Experience/Project management discipline
- SAP level 2+ training in any R/3 knowledge area
- 2+ years SAP Public sector knowledge area experience desirable
- SEM training and experience
- Technical knowledge in UDB, AIX Unix
- Knowledge of 3<sup>rd</sup> party tools (SAPhir, ERwin, DataStage, etc.)

<u>36. SAP BW Consultant</u> - Provides expertise in the Business Warehouse (BW) knowledge area for data warehouse implementations or SEM(BPS and CPM) implementations. The BW Consultant Leads a BW project from requirements through Infocube implementation and training. Knowledge transfer is required. Effectively communicates, documents and leads. Typical SAP BW Consultant for this position will have the following attributes:

- BW Certification
- 7+ years general data warehouse knowledge and experience
- Business Process, Logical and Dimensional Modeling
- ASAP Certification desirable
- SAP Certification in any knowledge area
- 3+ years SAP Public sector knowledge area experience
- SEM training and experience
- Data Quality expertise
- MySAP.com component, Workplace experience
- Training experience

<u>37. "OPEN"</u> – There may be a need in the future for various high level IT personnel that do not fall within the scope of the other thirty-six job classifications. All Statements of Work released under this classification will be issued only when the position needed does not fit within the scope of one of the other thirty-six classifications. The job description, required qualifications, and experience will be defined when the Statements of Work are issued. This "OPEN" classification will not be used to supersede any other classification or to circumvent the pricing limits for any other classification. When responding to Statements of Work for this classification, please submit best possible rates and resumes. As with the other job classifications, resumes will be reviewed by the State hiring manager. Candidates will be competitively selected based on qualifications and rates.

38. Data Warehouse Business Architect - Analyzes and documents requirements for data warehouse systems. Develops and/or oversees plans for data warehouse systems from project inception to conclusion. Constructs data models/dimensional models and activity/process models as may be required to define system functions. Coordinates closely with programmers to ensure proper implementation of program and system specifications. Develops, in conjunction with functional users, system alternative solutions. Provides support for the installation, testing, implementation, and ongoing maintenance of data warehouse systems. Conduct and document the results of special studies dealing with systems and/or business process issues. Requires a minimum of 5 years of current experience in this job class. Typical Business Architect candidate for this position will have the following attributes:

- Excellent interpersonal and communication skills
- Documentation skills
- 5+ years general data warehouse knowledge and experience
- Technical knowledge of Logical and Dimensional Modeling
- Technical knowledge in UDB, AIX Unix
- Knowledge of 3<sup>rd</sup> party tools (SAPhir, ERwin, DataStage, Business Objects, etc.)
- <u>39. Data Warehouse Data Modeler</u> Analyzes the data and functional requirements using modeling methodologies and analysis techniques. Conducts and assists with business analysis interviews. Assists in preparation and presentation of facilitated modeling sessions. Performs duties in facilitated sessions and analysis interviews. Develops data models using Logical and Dimensional Data modeling standard techniques. Designs models that meet the requirements documented by the Business Architect. Works with the Developers, Data Base Administrators, and customers on refining data issue requirements and design. Develops a Source To Target Mapping document that supplies information of where the data is coming from and where the data is going to be stored in the data warehouse. Requires 5 years of current experience in this job class. Typical Data Modeler candidate for this position will have the following attributes:
  - 5+ years general data warehouse knowledge and experience
  - 3+ years technical knowledge of Logical and Dimensional Modeling
  - Technical knowledge in UDB
  - Knowledge of 3<sup>rd</sup> party tools (SAPhir, ERwin, DataStage, Business Objects, etc.)
- **40. Data Warehouse Information Access Engineer** Provides technical expertise in developing Business Objects Universes and queries. Provides technical expertise in developing data warehouse queries using a 3<sup>rd</sup> party tool such as Business Objects, or Crystal. Designs queries for most effective and easy customer information access. Works closely with the Business Architect and Data Modeler. Assists in Business Objects Query training for customers. Reports status and communicates effectively in verbal and written form. Typical Data Warehouse Information Access Engineer candidate for this position will have the following attributes:
  - 5+ years general data warehouse knowledge and experience
  - 3+ years of Query tool experience (Business Objects, Crystal, etc.)
  - Knowledge of Logical and Dimensional Modeling
  - Technical knowledge in Business Objects Universes
  - Technical knowledge in UDB, AIX Unix
  - Knowledge of other Data Warehouse tools (SAPhir, ERwin, etc.)
- 41. Data Warehouse Extract Transform and Load Advanced Programmer Analyst Analyzes functional business requirements and design specifications for developing Extract, Transforma and Load (ETL) programs. Translates detailed design into computer software. Tests, debugs, and refines the computer software to produce the required product. Prepares required documentation, including both program-level and user-level documentation. Enhances software to reduce operating time or improve efficiency. Primary skill set comprises ETL program software, Unix Script, UDB, and AIX Unix.

<u>Secondary</u> skill set includes software standards. Requires a minimum of 5 year of current experience <u>in</u> <u>this job class</u>. Typical DW ETL Advanced Programmer Analyst candidate for this position will have the following attributes:

- 5+ years general data warehouse knowledge and experience
- Technical knowledge in ETL software such as: DataStage
- Knowledge of Logical and Dimensional Models
- 3+ years of Data Quality knowledge and practical experience
- Technical knowledge in Unix Script, UDB, AIX Unix

Knowledge of other Data Warehouse tools (SAPhir, ERwin, Business Objects, Crystal, etc.

**42. Quality Manager** - Skilled in the knowledge and application of quality systems and general quality concepts related to all organizational functions and activities. Ensures the creation and documentation of standards and procedures for agency processes. Serves as a resource for quality issues. Knowledgeable of industry best practices in regard to implementation of quality programs and concepts. Works with agency staff in the creation and implementation of a quality program. Serves as an advocate for quality concepts.

<u>43. Quality Analyst/Engineer</u> – Performs quality assurance functions related to project processes. Provides consultation and evaluation for process improvement. Initiates, facilitates and provides other assistance as needed for process improvement initiatives.

NOTE: The skill sets contained in this attachment are not intended to be all inclusive for individual assignments. It will not be unusual for a Statement of Work to require specific experience within these definitions and the State's overall Technical Architecture. For example a SOW may require an analyst or programmer with specific experience on accounting applications; or another may require an analyst who has specific experience in writing User Manuals; still another may require a project manager who has led teams involved in welfare systems activities; and so forth.